

U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

REMARKS

Upon entry of this amendment, claims 1, 2 and 4-13 are all the claims pending in the application. Claim 3 has been canceled. New claims 6-13 have been added. No new matter has been added.

Applicants thank the Examiner for approving the proposed drawing correction filed on July 15, 2002.

I. Claim Rejections

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hagiwara (U.S. Patent. No. 6,297,871). Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hagiwara in view of Sarda (U.S. Patent. No. 4,414,913). Applicants respectfully traverse these rejections on the following basis.

Claim 1 has been amended to include the features of claim 3. Regarding claim 1, the Examiner recognizes that Hagiwara fails to disclose or suggest a humidifier provided in a feed path of a recording medium. Nonetheless, the Examiner asserts that one of ordinary skill in the art would have been motivated to combine Hagiwara with the teaching of Sarda to arrive at the claimed invention. Applicants respectfully disagree.

Hagiwara discloses an apparatus for making semiconductor circuits by photolithography. The apparatus consists of an air-conditioner 1 and a main body 2. The main body 2 has a chamber 3 which houses an exposure unit 100 containing a reticle R and an optical projection system PL. Light from the optical projection system illuminates the reticle R having a specified

U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

circuit pattern formed in it. This causes the circuit pattern to be transferred to a substrate in the form of a semiconductor wafer coated with a resist layer. The exposure unit includes a drive system 24 for moving the semiconductor wafers in a horizontal plane (see column 13, lines 48-58).

In contrast to the semiconductor manufacturing apparatus disclosed by Hagiwara, Sarda discloses a thermo-engraving system for printing in relief on sheets of paper. In Sarda, a heat sensitive powder is deposited on each sheet of paper. The paper is then transported by a conveyor system through an oven 29 having heater elements 33 which melt the powder. The paper then proceeds through a cooling conveyor 37 which cools the paper. Because the paper has been heated and dried while passing through the oven 29, means are provided at the end of the cooling conveyor 37 to add humidity to the paper. The humidifying means include a tank of water 61 and wetting rollers 63, 65 and 67.

The Examiner alleges that it would have been obvious to one of ordinary skill in the art to provide the semiconductor manufacturing apparatus of Hagiwara with the humidifying means of Sarda, including a humidifier placed in a feeding path of a recording medium. Applicants respectfully disagree. There is absolutely no teaching in either reference which would motivate one of ordinary skill in the art to provide a semiconductor manufacturing apparatus with a humidifier placed in the feeding path of a semiconductor wafer. Sarda provides a humidifying device because each sheet of paper is heated and dried while transported through the oven 29. The humidifying device restores moisture back to the paper after the heating/drying process is complete.

U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

In Hagiwara, however, there is absolutely no disclosure or suggestion regarding a heating process, drying process, or any other factor which would necessitate the need to place a humidifier in a feed path of the semiconductor wafer. Thus, contrary to the assertion of the Examiner, one of ordinary skill in the art would not have been motivated to combine Hagiwara and Sarda to arrive at the claimed invention. Nothing in the applied references even remotely suggest that such a combination would be desirable.

As required by the Manual of Patent Examiner Procedure (“MPEP”), in order to establish a *prima facie* case of obviousness, the Examiner must establish that there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. While the Examiner may have succeeded in locating features of the claimed invention in isolation, the Examiner has pointed to no teaching, suggestion or motivation which would have led one of ordinary skill in the art to combine the references in the manner claimed.

Based on at least the foregoing, Applicants submit that claim 1 is allowable over the applied art and respectfully request that the Examiner withdraw the rejection. Claim 5 depends from claim 1 and therefore incorporates all the limitations thereof. Accordingly, Applicants submit that claim 5 is allowable at least by virtue of its dependency.

Claim 2, as amended, defines a new and unique combination of elements which forms a recording apparatus. Included among the features of this new apparatus is an air supply formed on a surface of the apparatus for supplying outside air into the apparatus, wherein at least one of a dehumidifier, a humidifier, a heater and a cooler are located upstream of an air supply port of

U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

said air supply. Applicants submit that the claimed combination is neither disclosed nor suggested by Hagiwara.

Hagiwara discloses a fan 18 formed in a surface of the apparatus which supplies outside air to the interior of the apparatus. The outside air supplied by fan 18 is then circulated through a cooler 7, a heater 8, and a fan 9, before being introduced into chamber 3. As depicted in figure 1, the cooler 7 and heater 8 are both disposed downstream of fan 18.

Thus, in contrast to the claimed combination, Hagiwara fails to disclose or suggest an air supply formed on a surface of the apparatus for supplying outside air into the apparatus, wherein at least one of a dehumidifier, a humidifier, a heater and a cooler are located upstream of an air supply port of said air supply. Rather, Hagiwara discloses a cooler 7 and heater 8 which are disposed downstream from the air supply 18 formed on a surface of the apparatus. As clearly shown in figure 1, the fan 9 of Hagiwara is not disposed on a surface of the apparatus and does not supply outside air into the apparatus.

Accordingly, Applicants submit that the claimed combination is neither disclosed nor suggested by Hagiwara and respectfully request that the rejection be reconsidered and withdrawn.

II. Allowable Subject Matter

Applicants would like to thank the Examiner for indicating that claim 4 would be allowable if rewritten in independent form. Applicants request that the Examiner hold rewriting claim 4 in abeyance until the rejection of base claim 1 has been reconsidered.

U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

III. New Claims

New claims 6-13 have been added. Applicants respectfully submit that new claims 6-13 patentably distinguish over the cited art based on the combination of features contained therein.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

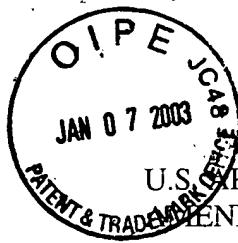
Respectfully submitted,

Kenneth Fields

Kenneth W. Fields
Registration No. P-52,430

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: January 7, 2003



U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

RECEIVED

JAN 10 2003

TC 2800 MAIL ROOM

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 3 is canceled.

The claims are amended as follows:

1. (Twice Amended) A recording apparatus comprising:

a medium fixing member for fixing a recording medium to its surface;

a recorder for producing a record on said recording medium; and

an air supply for supplying air into the apparatus to build up positive pressure in its interior;

wherein at least one member of the group consisting of a dehumidifier, a humidifier [means], a heater and a cooler is contained within said recording apparatus so that either temperature or humidity or both are held constant in said recording apparatus[.]; and

wherein the at least one member of the group consisting of the dehumidifier, the humidifier, the heater, and the cooler is the humidifier, and said humidifier is located in a feed path of said recording medium.

2. (Twice Amended) A recording apparatus comprising:

a medium fixing member for fixing a recording medium to its surface;

U.S. APPLICATION NO. 09/757,565
AMENDMENT UNDER 37 C.F.R. § 1.111

a recorder for producing a record on said recording medium; and
an air supply formed on a surface of the apparatus for supplying outside air into the
apparatus to build up positive pressure in its interior;
wherein at least one member of the group consisting of a dehumidifier, a humidifier, a
heater and a cooler is located upstream of an air supply port of said air supply so that either
temperature or humidity or both are held constant in said recording apparatus.

4. (Twice Amended) The recording apparatus according to claim [3] 1 which further
includes a humidifying chamber and a humidifying air supply for supplying air to said
humidifying chamber, said humidifier performing its function by a water-retaining material that
is imbibed with water and which is located within said humidifying chamber or between said
humidifying air supply and said humidifying chamber.

5. (Twice Amended) The recording apparatus according to claim [3] 1, wherein said
humidifier performs its function by a water-retaining roller that is brought into contact with or
proximity to the feed path of the recording medium.

Claims 6-13 are added as new claims.